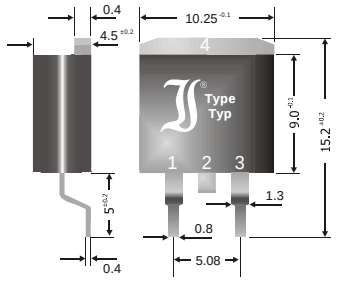
SK1020D2 ... SK10100D2

Surface Mount Schottky Rectifiers – Single Diode
Schottky-Gleichrichter für die Oberflächenmontage – Einzeldiode

Version 2006-04-06



Dimensions - Maße [mm]

Nominal Current Nennstrom	10 A
Repetitive peak reverse voltage Periodische Spitzensperrspannung	20...100 V
Plastic case Kunststoffgehäuse	TO-263AB D²PAK [1])
Weight approx. Gewicht ca.	1.6 g
Plastic material has UL classification 94V-0 Gehäusematerial UL94V-0 klassifiziert	
Standard packaging taped and reeled Standard Lieferform gegurtet auf Rolle	

Maximum ratings and Characteristics **Grenz- und Kennwerte**

Type Typ	Repetitive peak reverse voltage Periodische Spitzensperrspannung V_{RRM} [V]	Surge peak reverse voltage Stoßspitzensperrspannung V_{RSM} [V]	Forward Voltage Durchlass-Spannung V_F [V] [2])	
			I_F = 5 A	I_F = 10 A
SK1020D2	20	20	< 0.51	< 0.55
SK1030D2	30	30	< 0.51	< 0.55
SK1040D2	40	40	< 0.51	< 0.55
SK1045D2	45	45	< 0.51	< 0.55
SK1050D2	50	50	< 0.57	< 0.65
SK1060D2	60	60	< 0.57	< 0.65
SK1080D2	80	80	< 0.71	< 0.83
SK10100D2	100	100	< 0.71	< 0.83

Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschaltung mit R-Last		T_C = 100°C	I_{FAV}	10 A
Repetitive peak forward current Periodischer Spitzenstrom		f > 15 Hz	I_{FRM}	30 A [3])
Peak forward surge current, 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwelle	SK1020D2... SK1060D2	T_A = 25°C	I_{FSM}	135/150 A
	SK1080D2... SK10100D2	T_A = 25°C	I_{FSM}	115/125 A
Rating for fusing – Grenzlastintegral, t < 10 ms		T_A = 25°C	i^2t	80 A^2s
Junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur			T_j T_S	-50...+150°C -50...+175°C

1 Special type available in ultrathin package (1.4 mm), see datasheet L118
Sonderversion erhältlich im ultraflachen Gehäuse (1,4 mm), siehe Datenblatt L118
2 T_j = 25°C
3 Max. temperature of the case T_C = 100°C – Max. Temperatur des Gehäuses T_C = 100°C

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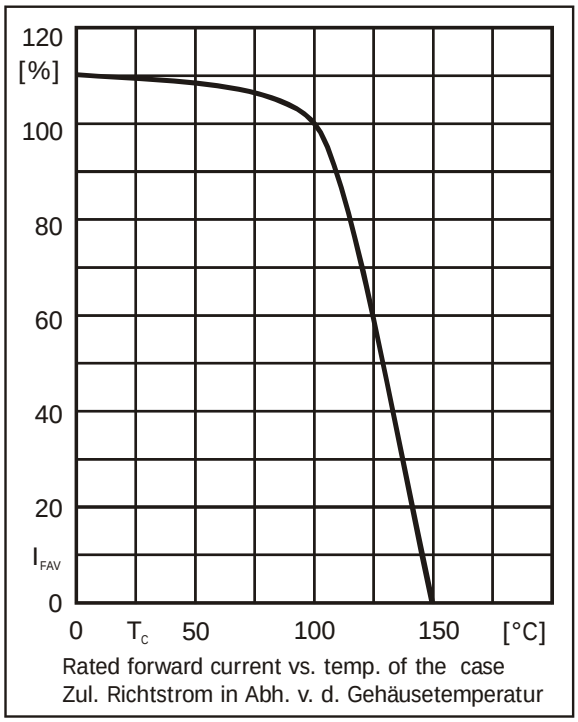
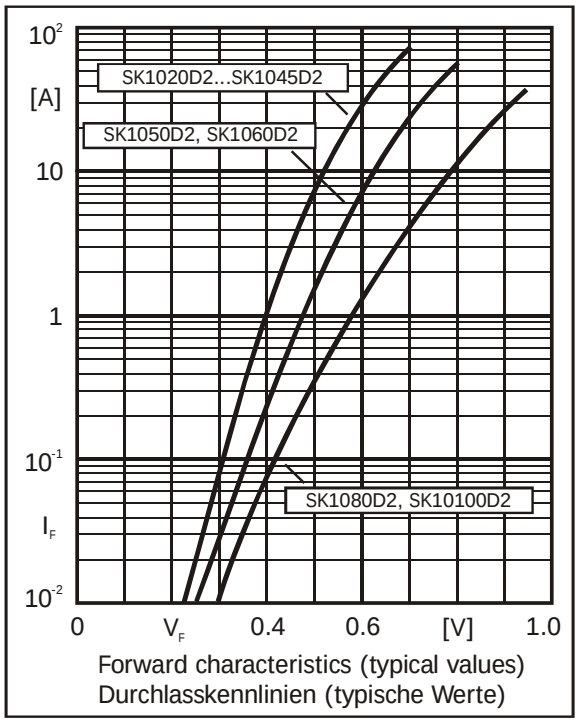
Characteristics				**Kennwerte**
Leakage current Sperrstrom	SK1020D2... SK1045D2	T_j = 25°C T_j = 100°C	$V_R = V_{RRM}$	I_R	< 300 µA < 45 mA
Leakage current Sperrstrom	SK1050D2... SK10100D2	T_j = 25°C T_j = 100°C	$V_R = V_{RRM}$	I_R	< 200 µA < 25 mA
Thermal resistance junction to case Wärmewiderstand Sperrschicht - Gehäuse				R_{thC}	< 1.5 K/W



Rated forward current vs. temp. of the case
Zul. Richtstrom in Abh. v. d. Gehäusetemperatur



Forward characteristics (typical values)
Durchlasskennlinien (typische Werte)

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